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(FILE 'HOME' ENTERED AT 12:30:10 ON 01 DEC 2009)

FILE 'REGISTRY' ENTERED AT 12:30:25 ON 01 DEC 2009 1 S 32315-10-9/RN L1L2 1 S 28721-07-5/RN L3 1 S 28721-08-6/RN L41 S 28721-09-7/RN L5 1 S 4698-11-7/RN FILE 'CAPLUS' ENTERED AT 12:31:21 ON 01 DEC 2009 872 S L2 L6 1742 S L1 L7 4 S L6 AND L7 L8 L9 4 S L8 NOT (2009/SO OR 2008/SO OR 2007/SO OR 2006/SO)

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YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN L132315-10-9 REGISTRY RN Entered STN: 16 Nov 1984 ED CN Methanol, 1,1,1-trichloro-, 1,1'-carbonate (CA INDEX NAME) OTHER CA INDEX NAMES: Carbonic acid, bis(trichloromethyl) ester (6CI, 8CI) Methanol, trichloro-, carbonate (2:1) (9CI) OTHER NAMES: Bis(trichloromethyl) carbonate CN Triphosgene MF C3 C16 O3 CI COM STN Files: AGRICOLA, BEILSTEIN\*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, LC CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, GMELIN\*, MEDLINE, MRCK\*, MSDS-OHS, PROMT, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, USPATOLD (\*File contains numerically searchable property data) Other Sources: EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

Cl<sub>3</sub>C-O-C-O-CCl<sub>3</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1732 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1742 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 1 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 5H-Dibenz[b,f]azepine-5-carboxamide, 10,11-dihydro-10-oxo-

MF C15 H12 N2 O2

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:800495 CAPLUS

DOCUMENT NUMBER: 151:56740

TITLE: Preparation of iminostilbene derivatives

INVENTOR(S):
Milanese, Alberto

PATENT ASSIGNEE(S): Italy

SOURCE: Ital. Appl., 18pp.

CODEN: ITXXCZ

DOCUMENT TYPE: Patent LANGUAGE: Italian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IT 2004RM0260	A1	20040826	IT 2004-RM260	20040526
PRIORITY APPLN. INFO.:			IT 2004-RM260	20040526

OTHER SOURCE(S): CASREACT 151:56740

AB Treatment of 10-methoxyiminostilbene with triphosgene in toluene containing triethylamine afforded the N-chlorocarbonyl derivative, which underwent ammonolysis and subsequent hydrolysis to yield oxcarbazepine.

IT 28721-07-5P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of iminostilbene derivs.)

RN 28721-07-5 CAPLUS

CN 5H-Dibenz[b,f]azepine-5-carboxamide, 10,11-dihydro-10-oxo- (CA INDEX NAME)

IT 32315-10-9, Triphosgene

RN 32315-10-9 CAPLUS

CN Methanol, 1,1,1-trichloro-, 1,1'-carbonate (CA INDEX NAME)

L9 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1257994 CAPLUS

DOCUMENT NUMBER: 144:22826

TITLE: Process for the preparation of oxcarbazepine

INVENTOR(S):
Milanese, Alberto

PATENT ASSIGNEE(S): Italy

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE					APPL	ICAT	ION :	DATE					
EP 1600443				A1 20051130				EP 2	004-	4253	20040526							
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	ВG,	CZ,	EE,	HU,	PL,	SK,	HR
WO	WO 2005118550			A1 20051215			•	WO 2	005-	EP38	90	20050413						
	W:	ΑE,	ΑG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KP,	KR,	KΖ,	
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΑ,	
								PL,					•				•	
		SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	
	ZM, ZW																	
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	ΝL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	G₩,	$\mathrm{ML}_{\prime}$	
		MR,	ΝE,	SN,	TD,	ΤG												
EP	EP 1748988		A1 20070207			EP 2005-733290					20050413							
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	ΙΤ,	LI,	LT,	LU,	MC,	ΝL,	PL,	PT,	RO,	SE,	SI,	SK,	TR			
CIORIT	ORITY APPLN. INFO.:								EP 2004-425379					A 20040526				
									,	WO 2	005-	EP38	90	1	W 2	0050	413	
HER SO	ER SOURCE(S):					CASREACT 144:22826												

AB The preparation of oxcarbazepine (I) from 10-methoxyiminostilbene (II) is claimed. For example, 66.9 g of II, in presence of 34.92 g of Et3N in 800 mL of toluene, is gradually reacted with 32.67 g of triphosgene in 300 mL of toluene for 6 h at temperature of 10-15°. Next, 200 mL of 30% aqueous NH3 is added to the reaction mixture at room temperature, and after some hours, 69.0 g

GΙ

of 10-methoxy-N-aminocarbonyliminostilbene (III) is obtained with purity > 95%. III is hydrolyzed by refluxing in 100 mL of 10%  $\rm H2SO4$ , and after workup, 57.0 g of I is obtained.

IT 28721-07-5P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of oxcarbazepine from methoxyiminostilbene in three steps)

RN 28721-07-5 CAPLUS

CN 5H-Dibenz[b,f]azepine-5-carboxamide, 10,11-dihydro-10-oxo- (CA INDEX NAME)

IT 32315-10-9, Triphosgene

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of oxcarbazepine from methoxyiminostilbene in three steps)

RN 32315-10-9 CAPLUS

CN Methanol, 1,1,1-trichloro-, 1,1'-carbonate (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1075777 CAPLUS

DOCUMENT NUMBER: 143:367224

TITLE: Process for preparing oxcarbazepine via chlorocarbonylation with triphosgene

INVENTOR(S): Banfi, Aldo; Bollini, Deborah; Serra, Maurizio; Di

Lernia, Gianluca

PATENT ASSIGNEE(S): Clariant International Ltd., Switz.

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.						KIND DATE				APPL	ICAT	ION 1		DATE				
WO	2005	 0928	62		A1 20051006				WO 2005-IB452						20050221			
	W: AE, AG, AL,			AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
		SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
		MR,	ΝE,	SN,	TD,	ΤG												
IT 2004MI0452					A1		2004	0609	IT 2004-MI452						20040309			
EP				A1 20070307				EP 2005-708576						20050221				
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	ΙΤ,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR			
JP 2007528385				Τ		2007	1011	JP 2007-502423						20050221				
US 20070149507					A1 20070628				US 2006-580145						20060518			
KR 2007031280					A 20070319				KR 2006-718221						20060907			
ORITY APPLN. INFO.:							IT 2004-MI452						A 2	0040	309			
									IT 2004-2004						A 20040309			
										WO 2	005-	IB45.	2	1	W 2	0050	221	
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:367224
GI

AB Process for preparing oxcarbazepine (I) via chlorocarbonylation of 10-methoxydibenzazepine precursor II with triphosgene as the chlorocarbonylating agent. Subsequent ammonolysis and final hydrolysis gave oxcarbazepine.

RN 32315-10-9 CAPLUS
CN Methanol, 1,1,1-trichloro-, 1,1'-carbonate (CA INDEX NAME)

CN 5H-Dibenz[b,f]azepine-5-carboxamide, 10,11-dihydro-10-oxo- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN L9 ACCESSION NUMBER: 2005:638851 CAPLUS DOCUMENT NUMBER: 143:153307 Novel process for preparation of TITLE: 10-oxo-10,11-dihydro-5H-dibenz[b,f]azepine-5carboxamide (oxcarbazepine) via intermediate, 10-methoxy-5H-dibenz[b,f]azepine-5-carbonyl chloride Parenky, Chandrashekar; Chaturvedi, Rohit INVENTOR(S): Amoli Organics Ltd., India PATENT ASSIGNEE(S): PCT Int. Appl., 12 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ A2 20050721 A3 20051006 WO 2004-IN322 20041015 WO 2005066133 A3 WO 2005066133 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG IN 2003MU01108 20050610 IN 2003-MU1108 20031020 Α A2 20060712 EP 2004-820974 EP 1678140 20041015 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK US 20070032647 A1 20070208 US 2006-576546 20060420 PRIORITY APPLN. INFO.: IN 2003-MU1108 A 20031020 WO 2004-IN322 W 20041015 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:153307 Novel process for preparation of 10-oxo-10,11-dihydro-5H-dibenz[b,f]azepine-5carboxamide (oxcarbazepine), known anticonvulsant drug, comprising the steps: (a) reacting 10-methoxy-5H-dibenz[b,f]azepine with bis(trichloromethyl) carbonate (BTC) and organic base such as aliphatic or aromatic tertiary amines in organic solvent, (b) conversion of the intermediate acid

tertiary amines in organic solvent, (b) conversion of the intermediate acid chloride to 10-methoxy-5H-dibenz[b,f]azepine-5-carboxamide using ammonia in organic solvent, (c) treating the intermediate with Lewis acid in an organic solvent at a temperature between 25°C to 80°C, preferably at 50°C to 70°C, and (d) isolating oxcarbazepine. The main objective of the invention was to provide a cost effective, safe and high yielding process for the production of 10-methoxy-5H-dibenz[b,f]azepine-5-carbonyl chloride from 10-methoxy-5H-dibenz[b,f]azepine without the use of phosgene gas. 28721-07-5P, Oxcarbazepine

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

ΙT

(preparation of 10-oxo-10,11-dihydro-5H-dibenz[b,f]azepine-5-carboxamide (oxcarbazepine) via 10-methoxy-5H-dibenz[b,f]azepine-5-carbonyl chloride)

RN 28721-07-5 CAPLUS

CN 5H-Dibenz[b,f]azepine-5-carboxamide, 10,11-dihydro-10-oxo- (CA INDEX NAME)

IT 32315-10-9, Bis(trichloromethyl) carbonate

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of 10-oxo-10,11-dihydro-5H-dibenz[b,f]azepine-5-carboxamide (oxcarbazepine) via 10-methoxy-5H-dibenz[b,f]azepine-5-carbonyl

chloride)

RN 32315-10-9 CAPLUS

CN Methanol, 1,1,1-trichloro-, 1,1'-carbonate (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT